



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,311	08/04/2000	Yoshihiro Ishikawa	195466US2PCT	8290
22850	7590	10/19/2006	EXAMINER	
C. IRVIN MCCLELLAND OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				NGUYEN, STEVEN H D
		ART UNIT		PAPER NUMBER
		2616		

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/601,311	ISHIKAWA, YOSHIHIRO	
	<b>Examiner</b> Steven HD Nguyen	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 24 July 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3-5,16,18-21 and 23-37 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,3-5,16,18-21 and 23-37 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 21 objected to because of the following informalities: Line 13, "said admission unit" should be changed to "said admission judgment unit". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 3-5 and 26-33 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As claims 1, 26 and 30, the specification does not disclose the step of receiving "at the radio base station" an indication that the mobile radio terminal has detected an increase or decrease of the data traffic. However, the specification such Figs 3-5 discloses the mobile or the base station independently detects the increase or decrease data traffic for example, Fig 3, mobile which detects an increase or decrease of data traffic will generate a signaling message to establish "increase" or release "decrease" the individual channel between the mobile and the base station. As fig 4, S7, Fig 5, S28 the base station which detects the increase of traffic, starts

Art Unit: 2616

to setup an individual channel and Fig 4, S8, Fig 5, S27, the mobile station which detects the increase of traffic, starts to setup an individual channel.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 3-5, 16, 18-21, 23-37 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As claim 1, 16, 21, 26, 30 and 34, "shifting from the communication using the common channel to the communication using the individual channel between the mobile radio terminal and the radio base station, when an admission of the shift is possible" is vague and indefinite because it unclear if the shifting is based on data traffic or the determination of whether or not the uplink reception interference level and the downlink transmission power level are greater than the respective uplink and downlink thresholds. Please clarify, so the meter and boundary can be determined. See MPEP 2171.01.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 16 and 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Wallentin in view of The admitted prior art.

Regarding claim 16, Wallentin discloses a CDMA base station device (Fig 10, Ref 26 and 28) comprising a communication unit (Fig 10, Ref 26) configured to carry out a communication using the common channel (Col. 2, lines 44-45, shared channel) with a mobile radio terminal (Fig 10, Ref 30); an admission judgment unit (fig 10, Ref 70-72 and 74, is used to detect the data traffic of mobile being increase or decrease by measuring the packet flow, See col. 11, lines 20-40) configured to detect an increase or a decrease of data traffic at the mobile radio terminal during the communication, and to carry out an admission judgment for a shift from the common channel to the individual channel at the radio base station when the increase in data traffic at the mobile radio terminal is detected (Col. 9, lines 27-47, Col. 9, lines 59 to col. 10, lines 17, Col. 11, lines 41-52 and col. 12, lines 5-17, determining if it has an available dedicated channel or not); wherein the communication unit is configured to shift from the communication using the common channel to the communication using the individual channel with the mobile radio terminal, when an admission of the shift is possible (Col. 9, lines 27-47, Col. 9, lines 59 to col. 10, lines 17, 11, lines 41-52 and col. 12, lines 5-17, make a switch from shared channel to dedicated channel if it has an available dedicated channel); a measuring unit, at the radio base station, configured to measure an uplink reception interference level and to relay the uplink reception interference level to the mobile radio terminal (Col. 11, lines 63-66). However, Wallentin fails to disclose a measuring unit, at the radio base station, configured to measure an uplink reception interference level and a downlink transmission power level, and to relay the uplink reception interference level and the downlink transmission power level, along with respective uplink and downlink thresholds, to the mobile radio terminal. However, in the same field of endeavor, The admitted prior art discloses a measuring unit, at the radio base station,

configured to measure an uplink reception interference level and a downlink transmission power level, and to relay the uplink reception interference level and the downlink transmission power level, along with respective uplink and downlink thresholds, to the mobile radio terminal (Page 2).

Since, Wallentin suggests a measured unit for measuring the uplink interference and transmitting this information to the mobile. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for a measuring unit, at the radio base station, configured to measure an uplink reception interference level and a downlink transmission power level, and to relay the uplink reception interference level and the downlink transmission power level, along with respective uplink and downlink thresholds, to the mobile radio terminal as disclosed in the admitted prior art into the teaching of Wallentin. The motivation would have been to improve the throughput of the system and reduce transmission delay and congestion.

Regarding claim 21, Wallentin discloses a mobile device comprising a communication unit configured to carry out a communication using the common channel with a radio base station (Fig 10 disclose a mobile device with communication unit and base station are communicating by using shared channel); and an admission judgment unit (Fig 10, Ref 76, 78 and 80-82 for measuring the packet flow to detect increase or decrease of the packet flow) configured to detect an increase or a decrease of data traffic at the mobile radio terminal during the communication, and to carry out an admission judgment for a shift from the common channel to the individual channel at the mobile radio terminal detected (Col. 9, lines 27-47, Col. 9, lines 59 to col. 10, lines 17, Col. 11, lines 41-52 and col. 12, lines 5-17, determining if it has an

Art Unit: 2616

available dedicated channel or not) and wherein the communication unit is configured to shift from the communication using the common channel to the communication using the individual channel with the radio base station, when an admission of the shift is possible (Col. 9, lines 27-47, Col. 9, lines 59 to col. 10, lines 17, 11, lines 41-52 and col. 12, lines 5-17, make a switch from shared channel to dedicated channel if it has an available dedicated channel) and receiving measured uplink interference from the base station (Col. 11, lines 63-66). However, Wallentin fails to disclose said admission unit configured to receive, from the radio base station, a measurement of an uplink reception interference level and a downlink transmission power level, along with respective uplink and downlink thresholds, said admission judgment including determining whether or not the received measured uplink reception interference level and the downlink transmission power level are greater than the respective uplink and downlink thresholds. In the same field of endeavor, the admitted prior art disclose said admission unit configured to receive, from the radio base station, a measurement of an uplink reception interference level and a downlink transmission power level, along with respective uplink and downlink thresholds, said admission judgment including determining whether or not the received measured uplink reception interference level and the downlink transmission power level are greater than the respective uplink and downlink thresholds (Page 2).

Since, Wallentin suggests a measured unit for measuring the uplink interference and transmitting this information to the mobile. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for receive, from the radio base station, a measurement of an uplink reception interference level and a downlink transmission power level, along with respective uplink and downlink thresholds, said

Art Unit: 2616

admission judgment including determining whether or not the received measured uplink reception interference level and the downlink transmission power level are greater than the respective uplink and downlink thresholds as disclosed in the admitted prior art into the teaching of Wallentin. The motivation would have been to improve the throughput of the system and reduce transmission delay and congestion.

8. Claims 16 and 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Quick in view of The admitted prior art.

Regarding claim 16, Quick discloses a CDMA base station device (Fig 2) comprising a communication unit (Fig 2, Ref 108 and 110) configured to carry out a communication using the common channel (Random access channel) with a mobile radio terminal (Fig 2, Ref 202); an admission judgment unit (Fig 3, Ref 302, Col. 11, lines 5-52, determining if the data traffic is over the first threshold, then switch the random to traffic channel by requesting for traffic channel, Col. 26, lines 12 to col. 27, lines 52) configured to detect an increase or a decrease of data traffic at the mobile radio terminal during the communication, and to carry out an admission judgment for a shift from the common channel to the individual channel at the radio base station when the increase in data traffic at the mobile radio terminal is detected (Col. 11, lines 5-52, Col. 26, lines 12 to col. 27, lines 52, determines if it has an available traffic channel or not); wherein the communication unit is configured to shift from the communication using the common channel to the communication using the individual channel with the mobile radio terminal, when an admission of the shift is possible (Col. 11, lines 5-52, Col. 26, lines 12 to col. 27, lines 52, determines if it has an available traffic channel). However, Quick fails to disclose a measuring unit, at the radio base station, configured to measure an uplink reception interference level and a

downlink transmission power level, and to relay the uplink reception interference level and the downlink transmission power level, along with respective uplink and downlink thresholds, to the mobile radio terminal. However, in the same field of endeavor, The admitted prior art discloses a measuring unit, at the radio base station, configured to measure an uplink reception interference level and a downlink transmission power level, and to relay the uplink reception interference level and the downlink transmission power level, along with respective uplink and downlink thresholds, to the mobile radio terminal (Page 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for a measuring unit, at the radio base station, configured to measure an uplink reception interference level and a downlink transmission power level, and to relay the uplink reception interference level and the downlink transmission power level, along with respective uplink and downlink thresholds, to the mobile radio terminal as disclosed in the admitted prior art into the teaching of Quick. The motivation would have been to improve the throughput of the system and reduce transmission delay and congestion.

Regarding claim 21, Quick discloses a mobile device comprising a communication unit configured to carry out a communication using the common channel with a radio base station (Fig 2 and 3); and an admission judgment unit (Col. 27, lines 5-52) configured to detect an increase or a decrease of data traffic at the mobile radio terminal during the communication, and to carry out an admission judgment for a shift from the common channel to the individual channel at the mobile radio terminal (Col. 26, line 12 to col. 27, line 52, determining if base station assigns an traffic channel or not) and wherein the communication unit is configured to shift from the communication using the common channel to the communication using the

individual channel with the radio base station, when an admission of the shift is possible ((Col. 26, line 12 to col. 27, line 52 make a switch from shared channel to dedicated channel if receiving an available traffic channel). However, Quick fails to disclose said admission unit configured to receive, from the radio base station, a measurement of an uplink reception interference level and a downlink transmission power level, along with respective uplink and downlink thresholds, said admission judgment including determining whether or not the received measured uplink reception interference level and the downlink transmission power level are greater than the respective uplink and downlink thresholds. In the same field of endeavor, the admitted prior art disclose said admission unit configured to receive, from the radio base station, a measurement of an uplink reception interference level and a downlink transmission power level, along with respective uplink and downlink thresholds, said admission judgment including determining whether or not the received measured uplink reception interference level and the downlink transmission power level are greater than the respective uplink and downlink thresholds (Page 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for receive, from the radio base station, a measurement of an uplink reception interference level and a downlink transmission power level, along with respective uplink and downlink thresholds, said admission judgment including determining whether or not the received measured uplink reception interference level and the downlink transmission power level are greater than the respective uplink and downlink thresholds as disclosed in the admitted prior art into the teaching of Quick. The motivation

Art Unit: 2616

would have been to improve the throughput of the system and reduce transmission delay and congestion.

9. Claim 18-20 and 23-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Wallentin/Quick and The admitted prior art as applied to claims 16 and 21 above, and further in view of Kumar (USP 6418148).

Wallentin discloses when an admission of the shift is not possible as a result of the admission judgment for the shift from the common channel to the individual channel so that the communication is to be kept on the common channel (Fig 5, Ref 59 discloses the communication can not switch to the dedicated channel, the communication is to be kept on the common channel, See col. 6, line 61 to col. 7, line 9 and col. 12, lines 43-52) or Quick discloses a method and system for switching from a shared channel to dedicated channel based on the allocated dedicated channel result and traffic condition of the shared channel (See col. 3, lines 35-45, Col. 4, lines 22-38, col. 11, lines 5-52 and col. 26, line 12 to col. 27, line 52). However, Wallentin/Quick fail to expressly disclose waiting a prescribed period of time for restarting an individual channel set up operation, which is determined according to a random number and different from the timing for retransmitting set up for other mobile radio terminals. Kumar discloses receiving a request for a supplemental channel, which is analogous to an individual channel, and if the request cannot be satisfied, the node that submitted the request is asked to resubmit its request after a random back-off period (col. 9, lines 4-19). Figure 3 shows that the back-off periods for different nodes may be set to the different periods of times. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to reject requests at the radio base station of Wallentin/Quick if no resources were available for a

particular request, and to wait a random period of time before retrying. One of ordinary skill in the art would have been motivated to do this in order to assign the mobile radio terminal requesting an individual the necessary resources when they became available, and to limit contention between different mobile radio terminals that may request resources at the same time.

***Allowable Subject Matter***

10. Claim 34 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

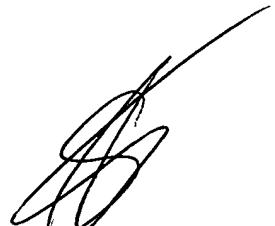
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Steven HD Nguyen  
Primary Examiner  
Art Unit 2616  
October 14, 2006